

060825.Sequence Listing  
SEQUENCE LISTING

AP5 Rec'd PCT/PTO 30 AUG 2006

<110> CREIGHTON UNIVERSITY  
<120> ESTROGEN RECEPTORS AND METHODS OF USE  
<130> 180.0012 0201  
<140> PCT/US 2005/007857  
<141> 2005-03-10  
<150> 60/552,067  
<151> 2004-03-10  
<150> 60/643,469  
<151> 2005-01-13  
<160> 27  
<170> PatentIn version 3.2  
<210> 1  
<211> 27  
<212> PRT  
<213> Artificial Sequence  
<220>  
<223> C-terminus of SEQ ID NO:20  
<400> 1

Gly Ile Ser His Val Glu Ala Lys Lys Arg Ile Leu Asn Leu His Pro  
1 5 10 15

Lys Ile Phe Gly Asn Lys Trp Phe Pro Arg Val  
20 25

<210> 2  
<211> 6  
<212> PRT  
<213> Artificial Sequence  
<220>  
<223> carrier protein  
<400> 2

Gln Phe Phe Gly Leu Met  
1 5

<210> 3  
<211> 10  
<212> PRT  
<213> Artificial Sequence  
<220>  
<223> carrier protein  
<400> 3

060825.Sequence Listing

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu  
1 5 10

<210> 4  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 4

Lys Ala Glu Asp Glu Ser Ser  
1 5

<210> 5  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 5

Tyr Pro Tyr Asp Val Pro Asp Tyr Ala  
1 5

<210> 6  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 6

Asp Tyr Lys Asp Asp Asp Asp Lys  
1 5

<210> 7  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 7

Tyr Thr Asp Ile Glu Met Asn Arg Leu Gly Lys  
1 5 10

<210> 8  
<211> 11  
<212> PRT

060825.Sequence Listing

<213> Artificial Sequence

<220>

<223> carrier protein

<400> 8

Met Ala Ser Met Thr Gly Gly Gln Gln Met Gly  
1 5 10

<210> 9

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> carrier protein

<400> 9

Asp Thr Tyr Arg Tyr Ile  
1 5

<210> 10

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> carrier protein

<400> 10

Thr Asp Phe Tyr Leu Lys  
1 5

<210> 11

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> carrier protein

<400> 11

His His His His His His  
1 5

<210> 12

<400> 12

000

<210> 13

<211> 6

<212> PRT

<213> Artificial Sequence

# 060825.Sequence Listing

<220>  
<223> carrier protein

<400> 13

Gln Tyr Pro Ala Leu Thr  
1 5

<210> 14  
<211> 11  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 14

Gln Arg Gln Tyr Gly Asp Val Phe Lys Gly Asp  
1 5 10

<210> 15  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 15

Glu Tyr Met Pro Met Glu  
1 5

<210> 16  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 16

Glu Phe Met Pro Met Glu  
1 5

<210> 17  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> carrier protein

<400> 17

Arg Tyr Ile Arg Ser  
1 5

# 060825.Sequence Listing

<210> 18  
 <211> 595  
 <212> PRT  
 <213> Homo Sapiens

<400> 18

Met Thr Met Thr Leu His Thr Lys Ala Ser Gly Met Ala Leu Leu His  
 1 5 10 15

Gln Ile Gln Gly Asn Glu Leu Glu Pro Leu Asn Arg Pro Gln Leu Lys  
 20 25 30

Ile Pro Leu Glu Arg Pro Leu Gly Glu Val Tyr Leu Asp Ser Ser Lys  
 35 40 45

Pro Ala Val Tyr Asn Tyr Pro Glu Gly Ala Ala Tyr Glu Phe Asn Ala  
 50 55 60

Ala Ala Ala Ala Asn Ala Gln Val Tyr Gly Gln Thr Gly Leu Pro Tyr  
 65 70 75 80

Gly Pro Gly Ser Glu Ala Ala Ala Phe Gly Ser Asn Gly Leu Gly Gly  
 85 90 95

Phe Pro Pro Leu Asn Ser Val Ser Pro Ser Pro Leu Met Leu Leu His  
 100 105 110

Pro Pro Pro Gln Leu Ser Pro Phe Leu Gln Pro His Gly Gln Gln Val  
 115 120 125

Pro Tyr Tyr Leu Glu Asn Glu Pro Ser Gly Tyr Thr Val Arg Glu Ala  
 130 135 140

Gly Pro Pro Ala Phe Tyr Arg Pro Asn Ser Asp Asn Arg Arg Gln Gly  
 145 150 155 160

Gly Arg Glu Arg Leu Ala Ser Thr Asn Asp Lys Gly Ser Met Ala Met  
 165 170 175

Glu Ser Ala Lys Glu Thr Arg Tyr Cys Ala Val Cys Asn Asp Tyr Ala  
 180 185 190

Ser Gly Tyr His Tyr Gly Val Trp Ser Cys Glu Gly Cys Lys Ala Phe  
 195 200 205

Phe Lys Arg Ser Ile Gln Gly His Asn Asp Tyr Met Cys Pro Ala Thr  
 210 215 220

# 060825.Sequence Listing

Asn Gln Cys Thr Ile Asp Lys Asn Arg Arg Lys Ser Cys Gln Ala Cys  
225 230 235 240

Arg Leu Arg Lys Cys Tyr Glu Val Gly Met Met Lys Gly Gly Ile Arg  
245 250 255

Lys Asp Arg Arg Gly Gly Arg Met Leu Lys His Lys Arg Gln Arg Asp  
260 265 270

Asp Gly Glu Gly Arg Gly Glu Val Gly Ser Ala Gly Asp Met Arg Ala  
275 280 285

Ala Asn Leu Trp Pro Ser Pro Leu Met Ile Lys Arg Ser Lys Lys Asn  
290 295 300

Ser Leu Ala Leu Ser Leu Thr Ala Asp Gln Met Val Ser Ala Leu Leu  
305 310 315 320

Asp Ala Glu Pro Pro Ile Leu Tyr Ser Glu Tyr Asp Pro Thr Arg Pro  
325 330 335

Phe Ser Glu Ala Ser Met Met Gly Leu Leu Thr Asn Leu Ala Asp Arg  
340 345 350

Glu Leu Val His Met Ile Asn Trp Ala Lys Arg Val Pro Gly Phe Val  
355 360 365

Asp Leu Thr Leu His Asp Gln Val His Leu Leu Glu Cys Ala Trp Leu  
370 375 380

Glu Ile Leu Met Ile Gly Leu Val Trp Arg Ser Met Glu His Pro Val  
385 390 395 400

Lys Leu Leu Phe Ala Pro Asn Leu Leu Leu Asp Arg Asn Gln Gly Lys  
405 410 415

Cys Val Glu Gly Met Val Glu Ile Phe Asp Met Leu Leu Ala Thr Ser  
420 425 430

Ser Arg Phe Arg Met Met Asn Leu Gln Gly Glu Glu Phe Val Cys Leu  
435 440 445

Lys Ser Ile Ile Leu Leu Asn Ser Gly Val Tyr Thr Phe Leu Ser Ser  
450 455 460

Thr Leu Lys Ser Leu Glu Glu Lys Asp His Ile His Arg Val Leu Asp  
Page 6



# 060825.Sequence Listing

tgtccagcca ccaaccagtg caccattgat aaaaacagga ggaagagctg ccaggcctgc	720
cggctccgca aatgctacga agtgggaatg atgaaaggtg ggatacgaaa agaccgaaga	780
ggaggggagaa tgttgaaaca caagcgccag agagatgatg gggagggcag ggggtgaagtg	840
gggtctgctg gagacatgag agctgccaac ctttggccaa gcccgtcat gatcaaacgc	900
tctaagaaga acagcctggc cttgtccctg acggccgacc agatggtcag tgccttgttg	960
gatgctgagc ccccatact ctattccgag tatgatccta ccagaccctt cagtgaagct	1020
tcgatgatgg gcttactgac caacctggca gacagggagc tggttcacat gatcaactgg	1080
gcgaagaggg tgccaggctt tgtggatttg accctccatg atcaggtcca ccttctagaa	1140
tgtgcctggc tagagatcct gatgattggt ctctgtctggc gctccatgga gcacccagtg	1200
aagctactgt ttgctcctaa cttgctcttg gacaggaacc agggaaaatg tgtagagggc	1260
atggtggaga tcttcgacat gctgctggct acatcatctc ggttccgcat gatgaatctg	1320
cagggagagg agtttgtgtg cctcaaactc attattttgc ttaattctgg agtgtacaca	1380
tttctgtcca gcaccctgaa gtctctggaa gagaaggacc atatccaccg agtcctggac	1440
aagatcacag acactttgat ccacctgatg gccaaggcag gcctgaccct gcagcagcag	1500
caccagcggc tggcccagct cctcctcatc ctctcccaca tcaggcacat gagtaacaaa	1560
ggcatggagc atctgtacag catgaagtgc aagaacgtgg tgcccctcta tgacctgctg	1620
ctggagatgc tggacgcca ccgcctacat gcgcccacta gccgtggagg ggcatccgtg	1680
gaggagacgg accaaagcca cttggccact gcgggctcta cttcatcgca ttccttgcaa	1740
aagtattaca tcacggggga ggcagagggg ttccttgcca cagtctga	1788

<210> 20  
 <211> 310  
 <212> PRT  
 <213> Homo Sapiens

<400> 20

Met	Ala	Met	Glu	Ser	Ala	Lys	Glu	Thr	Arg	Tyr	Cys	Ala	Val	Cys	Asn
1				5					10					15	

Asp	Tyr	Ala	Ser	Gly	Tyr	His	Tyr	Gly	Val	Trp	Ser	Cys	Glu	Gly	Cys
			20					25					30		

Lys	Ala	Phe	Phe	Lys	Arg	Ser	Ile	Gln	Gly	His	Asn	Asp	Tyr	Met	Cys
		35					40					45			

Pro	Ala	Thr	Asn	Gln	Cys	Thr	Ile	Asp	Lys	Asn	Arg	Arg	Lys	Ser	Cys
	50					55					60				

Gln	Ala	Cys	Arg	Leu	Arg	Lys	Cys	Tyr	Glu	Val	Gly	Met	Met	Lys	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



## 060825.Sequence Listing

65		70		75		80									
Gly	Ile	Arg	Lys	Asp 85	Arg	Arg	Gly	Gly	Arg	Met	Leu	Lys	His	Lys 95	Arg
Gln	Arg	Asp	Asp 100	Gly	Glu	Gly	Arg	Gly 105	Glu	Val	Gly	Ser	Ala 110	Gly	Asp
Met	Arg	Ala 115	Ala	Asn	Leu	Trp	Pro 120	Ser	Pro	Leu	Met	Ile 125	Lys	Arg	Ser
Lys	Lys 130	Asn	Ser	Leu	Ala	Leu 135	Ser	Leu	Thr	Ala	Asp 140	Gln	Met	Val	Ser
Ala 145	Leu	Leu	Asp	Ala	Glu 150	Pro	Pro	Ile	Leu	Tyr 155	Ser	Glu	Tyr	Asp	Pro 160
Thr	Arg	Pro	Phe	Ser 165	Glu	Ala	Ser	Met	Met 170	Gly	Leu	Leu	Thr	Asn 175	Leu
Ala	Asp	Arg	Glu 180	Leu	Val	His	Met	Ile 185	Asn	Trp	Ala	Lys	Arg 190	Val	Pro
Gly	Phe	Val 195	Asp	Leu	Thr	Leu	His 200	Asp	Gln	Val	His	Leu 205	Leu	Glu	Cys
Ala	Trp 210	Leu	Glu	Ile	Leu	Met 215	Ile	Gly	Leu	Val	Trp 220	Arg	Ser	Met	Glu
His 225	Pro	Gly	Lys	Leu	Leu 230	Phe	Ala	Pro	Asn	Leu 235	Leu	Leu	Asp	Arg	Asn 240
Gln	Gly	Lys	Cys	Val 245	Glu	Gly	Met	Val	Glu 250	Ile	Phe	Asp	Met	Leu 255	Leu
Ala	Thr	Ser	Ser 260	Arg	Phe	Arg	Met	Met 265	Asn	Leu	Gln	Gly	Glu 270	Glu	Phe
Val	Cys	Leu 275	Lys	Ser	Ile	Leu	Leu 280	Leu	Asn	Ser	Gly	Ile 285	Ser	His	Val
Glu	Ala 290	Lys	Lys	Arg	Ile	Leu 295	Asn	Leu	His	Pro	Lys 300	Ile	Phe	Gly	Asn
Lys 305	Trp	Phe	Pro	Arg	Val 310										

## 060825.Sequence Listing

<210> 21  
 <211> 933  
 <212> DNA  
 <213> Homo Sapiens

<400> 21  
 atggctatgg aatctgccaa ggagactcgc tactgtgcag tgtgcaatga ctatgcttca 60  
 ggctaccatt atggagtctg gtcctgtgag ggctgcaagg ccttcttcaa gagaagtatt 120  
 caaggacata acgactatat gtgtccagcc accaaccagt gcaccattga taaaaacagg 180  
 aggaagagct gccaggcctg ccggctccgc aaatgctacg aagtgggaat gatgaaaggt 240  
 gggatacgaa aagaccgaag aggagggaga atgttgaaac acaagcgcca gagagatgat 300  
 ggggagggca ggggtgaagt ggggtctgct ggagacatga gagctgcaa cctttggcca 360  
 agcccgtca tgatcaaacg ctctaagaag aacagcctgg ccttgtccct gacggccgac 420  
 cagatggtca gtgccttggt ggatgctgag ccccccatac tctattccga gtatgatcct 480  
 accagaccct tcagtgaagc ttcgatgatg ggcttactga ccaacctggc agacagggag 540  
 ctggttcaca tgatcaactg ggcgaagagg gtgccaggct ttgtggattt gaccctccat 600  
 gatcagggtcc accttctaga atgtgcctgg ctagagatcc tgatgattgg tctcgtctgg 660  
 cgctccatgg agcaccagg gaagctactg tttgctccta acttgctctt ggacaggaac 720  
 cagggaaaat gtgtagaggg catggtggag atcttcgaca tgctgctggc tacatcatct 780  
 cggttccgca tgatgaatct gcaggagag gagtttgtgt gcctcaaac tattcttttg 840  
 cttaattctg gtatctcaca tgtagaagca aagaagagaa tcctgaactt gcatacctaaa 900  
 atatttgga acaagtgggt tcctcgtgtc taa 933

<210> 22  
 <211> 752  
 <212> DNA  
 <213> Homo Sapiens

<400> 22  
 ggtacccgcg cccgcgccgc ccgtcggggg ggccgccgcg cccggcagga gggagggagg 60  
 gagggagggg gaagggagag cctagggagc tgcgggagcc gcgggacgcg cgacccgagg 120  
 gtgcgcgcag ggagcccggg gcgcgcggcc cagcccgggg gttctgcgtg cagcccgcgc 180  
 tgcgttcaga gtcaagttct ctgcgccggc agctgaaaaa aacgtactct ccaccactt 240  
 accgtccgtg cgagaggcag acccgaaagc ccgggcttcc taacaaaaca cacgttgga 300  
 aaccagacaa agcagcagtt atttgtgggg gaaaacacct ccaggcaa ataacacgggg 360  
 cgctttgagt cacttgggaa ggtctcgctc ttggcattta aagttggggg tgtttggagt 420  
 tagcagagct cagcagagtt ttatttatcc ttttaatggt tttgtttaat gtgctcccca 480  
 aatttccttt catctagact atttgattgg aaatatgtca gctatgatga tgactttctg 540

# 060825.Sequence Listing

ggaagcgatt cctgtcaccc gctttcccct cctccccacc ccacgtcctg gggcttttaga	600
gagcgatttg gagttgaatg ggtctgattt cggagtttagc tggctgagtc cgcgctggag	660
cggattgctg gcatgtgact tctgacagcc ggaaatttgt aggtgtcccg cgagtttaaa	720
acaagccata tggaagcaca agtgcttaaa aa	752

<210> 23  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer

<400> 23 cggaattccg aagggaagta tggctatgga atcc	34
---	----

<210> 24  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> primer

<400> 24 cgggatccag aggcttttaga cacgaggaaa c	31
---	----

<210> 25  
 <211> 4359  
 <212> DNA  
 <213> Homo Sapiens

<400> 25 ctggtatctc acatgtagaa gcaaagaaga gaatcctgaa cttgcatcct aaaatatttg	60
gaaacaagtg gtttcctcgt gtctaaagcc tctggtcata aggcctcaca gtatcctgca	120
gatcatcaaa tccgtgtgtg gacgtgggga cattttgttt tgaggcagtt acatgaccat	180
gggcaagtgg attggtctct ctggccttca gttttctcat ttgcaatgat tcaatggttt	240
gccttaaagt gtcttaagaa ggataggata gctaccaca aactttggat caaattttct	300
tcaaaacatc cttcccctga ctttaaaata tgccctggca accaactc aacacccgta	360
gctagatgag ttataacaga gtgactgaag agagctcca caattcctag ttattaaata	420
cctgactaat tttcattagg agacatttaa gaactttagt gatgggaaga ttacatata	480
taattgatag tacaatctga cagagctgaa tagctcctgt ttgtcaactg ttaaattctt	540
tgtgcaatta ggtcaaagat caagatcaaa acaagggtg cccattgacc tgttcactcc	600
tgagaaaaat ggcaaaccat tgaatcataa atcatgacag ccaaataat tttaggatat	660
taatgcaccc ctcatctttg caagtgagaa aactgaaggc cagagagact aatttacttg	720

## 060825.Sequence Listing

cccatttttg ataaaaatgt caccattttac agaatgtgga ctcctatggt ggagtctgtt	780
gaaggacatg gcacatttaa cagcatcaga gcatttttta ttaaaattta atttgtgcat	840
gacttctaata gctgaagaac gccaaagctag gaagaagtca tgggctgaga tggggacaga	900
gagaacacac aatattcagt gactgtccgt gcagctggct gcccttgaaa atatccgaac	960
tatccactgg gaaaatgcct gtccccttgg ggtaattacc agagtttcaa catgccccaa	1020
gctgcctcat cttcaggggg aacttgttct agcgatttta gtatcaagaa gctaattggtc	1080
ccagggaaag ggttatTTTT aatatttagc tactgtgcta aaaatcacct aagtttctag	1140
agtcttggga aatttcataa gggaaagaac aaaggcaact tgttgactac ccactggtca	1200
ttctcctctg gtcttattac atacatggat gccagtttag attgtgttta tataggaaaa	1260
tttaaagtgt tgagcctcct taaggaacat catcaataca gatatatcag atagttctgt	1320
ccagcaaaaa acgtgcttat ttgctacaag taaattttta tttatttttc tcacttcct	1380
cactccttca aatttcagg taaatagctg cccaggagtt gcttcattct tgtcccaaaa	1440
tacctagaca attgcgggat aaggagaatg gcagggaggg agtagtggct aaaatcacac	1500
ccttcaaaag aaagtgtgta ggacacacaa ttgtgagaag tctgaatgcc atgcacatag	1560
ggtatgactc actttgaaaa ttgtttataa tcaaggaaat gaaaatgagt taatttcgtg	1620
catgcatcat ttaaagccaa atgagaagaa acttctaatt tattttgtta cttttcggct	1680
aacactggca gtatgtaaca gatttatTTT gcagaaacat ctagattgtc cgtgatcttg	1740
atcctgccct tatgtgtctt gtctttgaaa cccagtgttt cctggatata tggttcagga	1800
gacaagtttc cagaatcaag ttaggaccca ggtcttcttt ttttccaaac caaacattct	1860
tgctaatacct aaactacctg aggcagcctg tgggtggcctc agctctaaaa ccattgttta	1920
aaggcttcta cccatcaatg gcccttcagc agagtggtag gggttaacggg gtaggggtctg	1980
gagtcagggg agacctgggt tcaaataccta catctttaca cctctaatac ccagtgtcct	2040
tgtctataaa ttgggaatat agccatgtca tgggattctt gtgagggtta aatgaggtaa	2100
aacacataca atgcttagca tgtatacaat taagcactaa ataattgaaa cacattaagt	2160
actaaatgaa tgtcagcagc ttatcactat tatctgtata atgataccaa ggggtgtgccg	2220
actcataccc ttagggggtg gctggattcg gccttttctc tcgggaaaac atacctgatt	2280
tattaatagt gctttcaagc atgtgataaa tttctcaaac tgctgtctt gttccctaga	2340
aacaccagga aggcctacct caaatagcaa cagagaaacc tatcggagcc ttaccctaca	2400
gctttccttg gggcacgggt gagcaatctg ccttagaggg gagaggctct gtgctgaggc	2460
tctttgaatg ctttgaataa atagatcccc agataatgaa aagacttcaa aacaaattct	2520
acaagaaact gagtagtggt tatagtgagg ccctagtgtg catgcaaaaa acccccactg	2580
cccttgctta aatgtatctg attaacttga atacattttt aaatgagggc tttttttccc	2640

## 060825.Sequence Listing

tctttcagtg	tttcggccag	tcatttgcca	cttctcattc	catcttagtt	ctctgtaaag	2700
aagggtgccag	agacctaagg	tgcccaaggc	aattttgcat	tttacaattc	taagcttttag	2760
aatgaagtca	tcaatttgct	acatccggac	tacagtgcaa	ttattccttt	gccttgctgg	2820
aaattggagt	gaaatctttc	tagctgtcaa	tttcaactca	gttgcagtag	tgttttgaag	2880
aattaatggc	gataagggtta	gaaaatttta	agtcaaacgt	agggaaaaag	taccagctag	2940
accatcataa	gcatttgctt	tgaaagcatg	cttctaaagt	gtgtttaacc	tcaaataaca	3000
gtcacaaata	tgggttattat	gaatgtatgc	acagattttt	atgtttctaa	ttttaagaag	3060
ttctagggag	ctccctgtaa	cgatttaggg	aatctctaga	ttctgatata	ctgcaagtct	3120
tttaatggta	ggaatcacat	tgaattaatt	ttgtaggccc	agggcctaaa	tttagtaggt	3180
gttcagtacc	tattggcatc	aattcatatg	taggtttaaa	atactgtatg	aagatacaga	3240
atcaccacca	tcaaatacaa	ttgaaatatg	taacaggcta	gtataatatt	aacatctgac	3300
tttaaacaac	aacaaagaaa	ccaaatgagt	aactcctccc	ttcaaactaa	tagtcagttt	3360
cttccaactc	agtctctttc	tcctctcagg	aagaatgcgt	atctaaaaat	ttcccattgc	3420
agactgctgg	aaacaacatt	ctaaactatt	tatgcttctg	caataacctt	tccaatttgc	3480
tggaccagtg	caagattaaa	cacgagatat	ctcaagtctc	aatgtaaagg	aacaccacga	3540
cagcctggac	tgtgggtgaa	gttcattctt	ccccagcaga	ctctgccttt	cattctcggg	3600
gttgggtgtg	ccccaaacag	aggtagcgac	ggtaacgaag	ccaagaatg	ttcaaccaca	3660
acctgtctgt	gaagggtgtg	gatgacgttt	gccattcagg	tgaagattat	ttatgttcca	3720
gtcccacctg	agtagcaaag	tgaacactgt	gctgaatgct	cagaaagatg	ttaatgaacc	3780
gtgctggaca	gagcagagct	gaaaggcgcc	ttgcgagtgt	cgtagtgaga	atgtggctgt	3840
cccagctgca	aagccctgtt	aggaggcatg	aggaagcact	tgctgcccta	agaaacgatg	3900
ccttcgacat	tttcaaaaga	tctatgtggc	tgtctgaaac	aatgcggaga	gcagatagac	3960
gcaatatttg	ggaaccaaag	agtgactgct	gttggcgttg	catcataaca	taagcgcttt	4020
cccccttctc	gtcactatca	tttgtatcaa	ccaaagaact	gatctctggg	atcctcgaag	4080
gaatgctgtg	gggatattct	tcatctctgt	tcatggtaca	tcagcaattt	gtggggaaaa	4140
gatggactat	ataacacaat	gatctgccta	aaagaaactg	tctctactta	tagggggctg	4200
agcaaacctt	agagcatctg	cggatgctcg	tcattatctt	caaaagtccc	caagagtttt	4260
tctccatact	ttattattgc	tattttgttt	aggctagaaa	aaaaaaaaac	tcataaaatt	4320
gtcttcaaac	caaaccaaaag	gaaaaaaaaa	aaaaaaaaaa			4359

<210> 26  
 <211> 30  
 <212> DNA

060825.Sequence Listing

<213> Artificial Sequence

<220>

<223> primer

<400> 26

gcaaagaaga gaatcctgaa cttgcatcct

30

<210> 27

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 27

ttagtcaggt atttaataac taggaattg

29